Leah Treppel
SMARTeam Manager

Program Executive Office for
Simulation, Training and Instrumentation
PM, Future Force (Simulation)
Leah.Treppel@us.army.mil
(407) 384-3563 (DSN: 970-3563)

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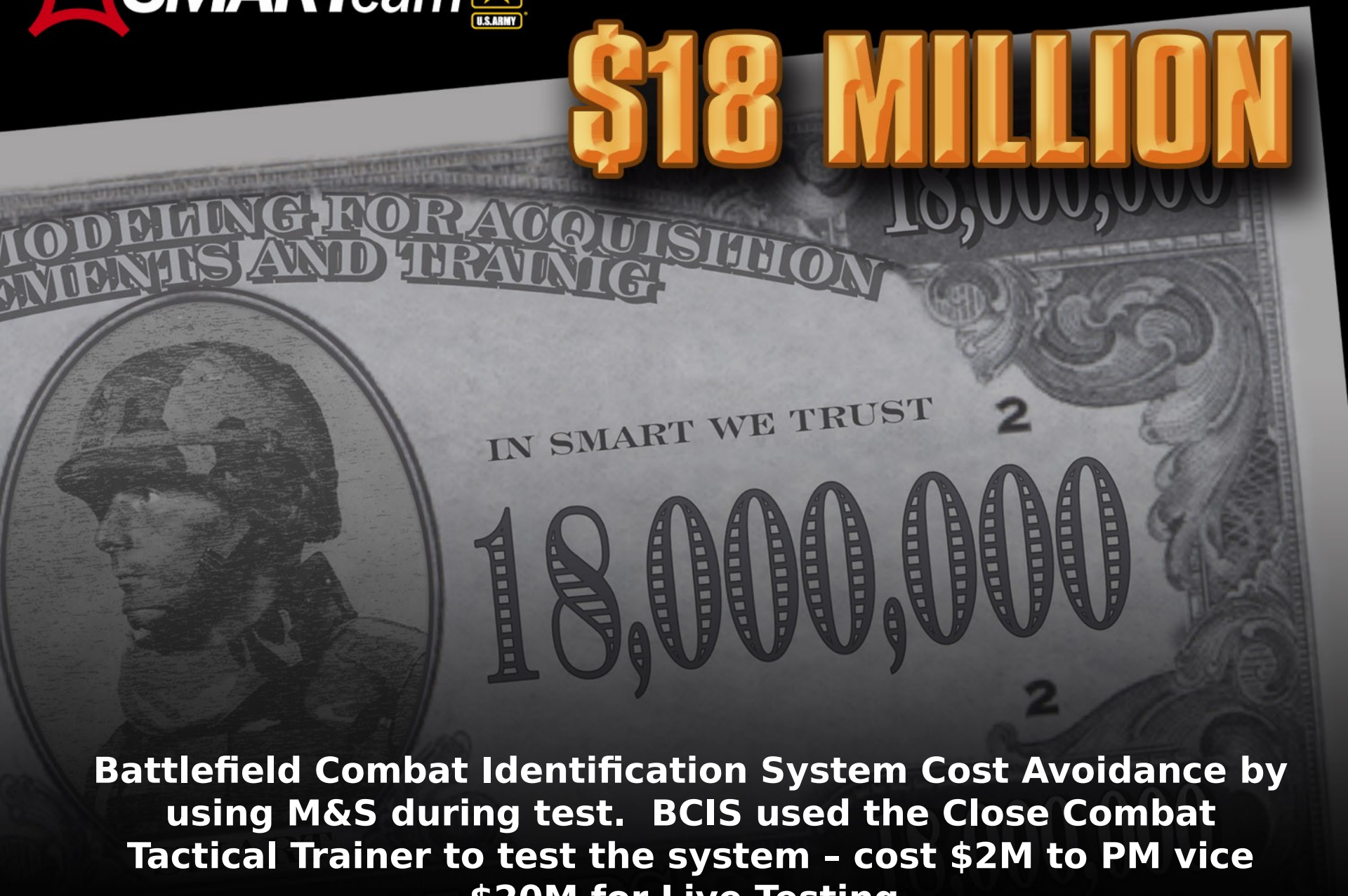
THE ARMY SMARTeam U.S. ARMY

$70 MILLION

PEO Aviation/PM Longbow Apache, Block II saved $70M using M&S to Design and Evaluate their major program upgrade.

THE ARMY SMARTeam

$18 MILLION



Battlefield Combat Identification System Cost Avoidance by using M&S during test. BCIS used the Close Combat Tactical Trainer to test the system – cost $2M to PM vice $20M for Live Testing

Average cost spent by Program/Product Manager
to a Contractor to write a Simulation Support Plan – cost does not include implementation

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The current number of organizations that are currently strategic partners of the Army SMARTeam including BCSE, PEO STRI, ASA(ALT), RDECOM and HQ TRADOC Futures Center.

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PRICELESS

The current cost to a Program Manager/Project Leader to receive assistance from the Army SMARTeam for Modeling and Simulation Planning via the required Simulation Support Plan.

THE ARMY SMARTeam

PM WIN-T*…" thank you for the SMARTeam support we received. The three day site visit was very productive for my staff and the WIN-T program. Your team members were well prepared, ready to work, and displayed a genuine desire to assist in producing a quality Simulation Support Plan and M&S plan." *COL Cole

PM Apache*…" want to thank all of you for your time and efforts, we couldn't have done it without you ." *Skip Johnston

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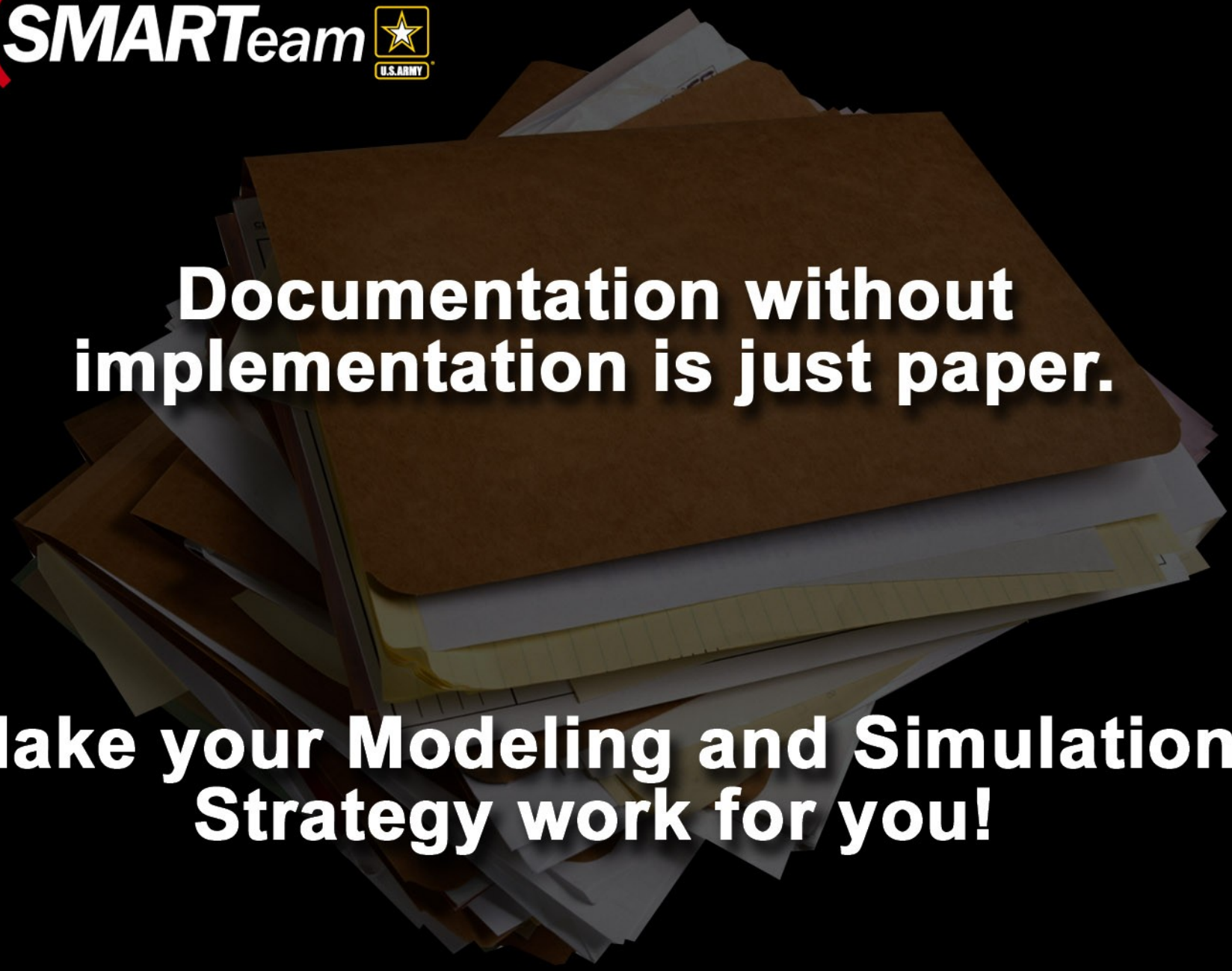

Documentation without implementation is just paper.

Make your Modeling and Simulation Strategy work for you!

THE ARMY SMARTeam U.S.ARMY

SERVICES

- **A single Army belly-button of information regarding M&S tools and where those tools reside. The *SMARTeam* is in the *SMART* execution business – making *SMART* more than just a *"concept"* - through strategic partnerships.**
- **Provide on-the-spot expertise to Army Project Managers on the use of Modeling and Simulation Support Planning.**
- **Bridge the gap between Modeling and Simulation Policy and execution (and vice versa).**
- **Gathering lessons learned from Army Programs and distributing best business practices and information regarding available models and simulation tools.**

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For support on your program's M&S planning:

Contact:

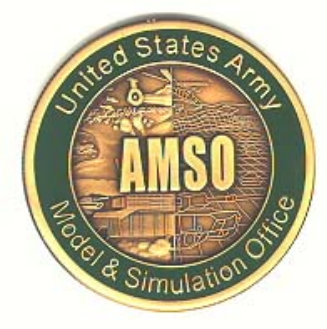
SMARTeam@PEOSTRI.ARMY.MIL

And Visit:

WWW.AMSO.ARMY.MIL/SMART

BACKUP

THE ARMY SMARTeam



What is SMART?

SMART is a change in Army business practices, through the exploitation of M&S and other information age technologies to facilitate collaboration and synchronization of effort across the total life cycle of Army systems.

- **SMART is about a change in Army business practices**
- The PM develops an M&S strategy that is integrated with and supports the overall acquisition strategy.
- **SMART exploits M&S and related information age technologies**
- Simulation support planning is conducted to determine how M&S can be used to reduce program risk, cost and schedule.
- **SMART is an enabler for successful Army Transformation**
- Future concept analysis, development, test and training efforts will leverage these simulation products to accelerate Army transformation.

Ongoing Initiatives

Contact Team Events (*CT*) : On the job training on building Simulation Support Plans and other M&S uses.

Lessons Learned Events (*LL*): Gathering information from past DoD projects for others to use.

Formal Courses: Classroom training courses ranging from senior leadership classes to specialized training courses with lengths from 1 day to two weeks.

Strategic Program Partners: Create a specific partnership with programs – government and industry partners – to further the use and success of M&S in Program Management.

Current Partners/Successes

Contact Team

- One Tactical Engagement Simulation System (*OneTESS*) – Jul ’04
- Joint Tactical Radio System Cluster 5 *(JTRS Cl5)* - Jun ’04
- Apache Longbow Block III - Mar ‘04 & May ’04
- Warfighter Information Network-Tactical *(WIN-T)* - Feb ’03
- Intelligence Modeling and Simulation for Evaluation (*IMASE*) - Dec ’03
- Joint Tactical Radio System Cluster 1 (*JTRS Cl1)* - Nov ’03
- Fatigue Intervention and Recovery Model (*FIRM)* - Aug ‘03

Lesson Learned

- Comanche- Jun ’04
- Apache Longbow Block III - May ’04
- Joint Common Missile (*JCM)* - Jul ’03
- Advanced Threat Infrared Countermeasure (*ATIRCM)* - Jul ’03
- Aerial Common Sensor *(ACS*) - May ’03

Sample Program Lessons Learned and Distributed

- Creating, documenting and executing an M&S strategy that supports a contractor down-select decision requires clear communication of that strategy and early coordination and collaboration of effort among key system stakeholders. *(WIN-T)*

- Identify opportunities to develop/reuse/leverage models and simulations that can support test and training events, concurrently, if combined test and training events are planned. *(IMASE)*

- Mapping ORD/CDD/CPD KPPs to models and simulations is a crucial initial step in determining how a program can benefit from M&S. *(JTRS CL1)*

Vision

- A single Army belly-button of information regarding M&S tools and where those tools reside. The *SMARTeam* is in the *SMART* execution business – making *SMART* more than just a *"concept"* - through strategic partnerships.

- Creating/updating templates and databases using best business practices from current and past programs that saved dollars using M&S as a tool.

- Working with the Combat Developers to ensure they are better able to translate user community capabilities by using actual models and simulation environments and/or a robust M&S planning document for transfer to the Materiel Developer with the Capabilities Documentation for Acquisition.

- Incorporating the JCIDS process into the M&S Planning information for the Combat Developer and Materiel

PEO STRI as Army SMARTeam Lead

- PEO STRI Center of Excellence in Materiel Development and Life Cycle Support of Modeling, Simulation, Training and Testing Products for the Army. Capable of making a difference to meet Army Transformation Objectives and DoD Training Transformation Objectives.

- PEO STRI understands and lives the differences between domains in M&S and Acquisition and provides translations and cross over information to both communities.

- Reorganization interviews with ASA (ALT) leadership determined that they see PEO STRI as the coordinator of M&S/SMART efforts.

- Currently has strategic relationship with UA in the M&S realm including KPP #6 – Training. PM FF(S) directly supports the PM UA *SMART* Management Office. Currently providing SMART expertise to external PEOs providing expertise to write Simulation Support Plans and M&S requirements

SMART Resources
Policy and Guidance

DoD Instruction 5000.2 May 12, 2003

Modeling and Simulation (M&S). The PM shall plan for M&S throughout the acquisition life cycle. The PM shall identify and fund required M&S resources early in the life cycle.

Army Acquisition Policy AR 70-1 December 31, 2003

The MATDEV is responsible for the effective use of M&S. It is critical that coordination among agencies with significant expertise in M&S and their supporting activities is effectively managed. The MATDEV plans, manages, documents and communicates the M&S approach and needs by maintaining a Simulation Support Plan.

Army M&S Management Policy AR 5-11 August 10, 1997

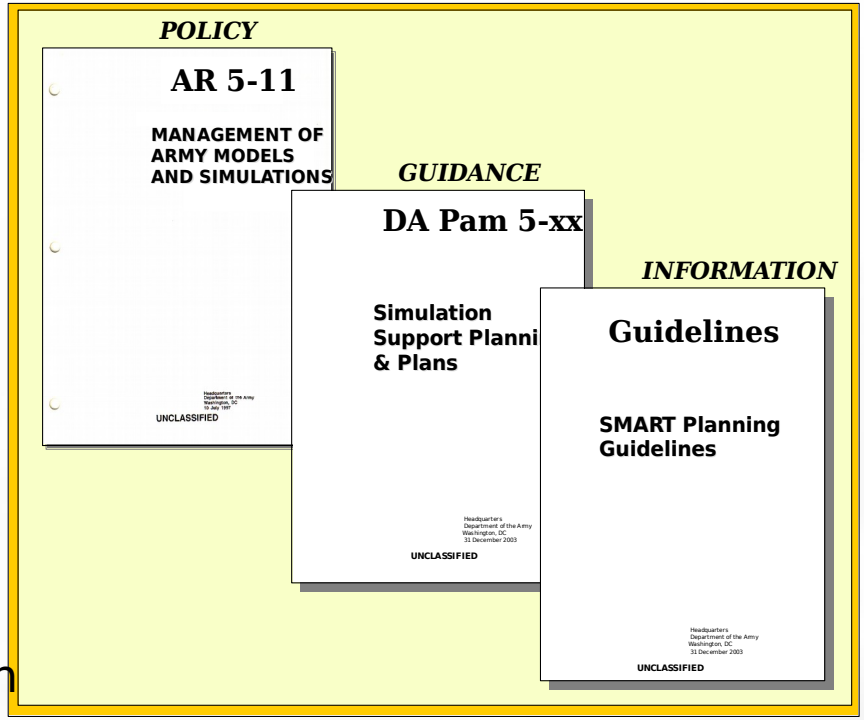
A simulation support plan will be developed for all ACAT I and II and non-major programs. VV&A activities will be included in the simulation support plan.

SMART and SSP Policy

Three tiers:

- AR 5-11 – Being revised to include SMART concept and clarify requirement for SSPs

- DA Pam on Simulation Support Planning and Plans:
  - Detailed requirements for SSPs
  - SSP Proponent
  - SSP development, format & content
  - CDD to SSP crosswalk
  - Authoritative System Representation



- SMART Planning Guidelines
  - Sep 02, Appendix C revised – SSP management, form & content
  - Future update after draft DA Pam 5-xx published

Army SSP History

1996: SAAL: SSPs required

1997: SSP Guidelines

2000: SMART Planning Guidelines

2000: SMART Execution Plan

2001: TRADOC: SSPs part of ICT process

2001: CSA approves Army requirements

2002: AMSO added as AROC Advisor

2003: TRADOC: Rqmts docs require SSPs

Simulation Support Plans are being used today to support decisions about Army programs.